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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,394	11/23/2005	Oliver Baumann	GK-ZEI-3277/500343.20297	9038

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REED SMITH, LLP
ATTN: PATENT RECORDS DEPARTMENT
599 LEXINGTON AVENUE, 29TH FLOOR
NEW YORK, NY 10022-7650

EXAMINER

LARYEA, LAWRENCE N

ART UNIT PAPER NUMBER

3735

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/533,394		BAUMANN ET AL.	
	Examiner		Art Unit	
	Lawrence N. Laryea		3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>28 April 2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities:

At claim 15, line 1, "optical" should be deleted.

Appropriate correction is required.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "tilting device for tilting the camera chip" in claim 14, and "imaging system having at least two different adjustable magnification" in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-16- and 18-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Re claim 13, it is unclear what applicant meant by "interchangeable objective".

Re claim 14 at line 3 recites the limitation "the camera chip".

There is insufficient antecedent basis for this limitation in the claim.

Further regarding claim 14 it is unclear whether the limitation at line 4 is directed to the image recording unit, the tilting device, or the camera chip.

The term "high" in claim 14 is a relative term which renders the claim indefinite.

The term "high" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

6. Claim 15 recite the limitation " the digitally controllable illumination unit " at line 2-3. There is insufficient antecedent basis for this limitation in the claim.

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7. Regarding claim 16, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

8. Regarding claim 16, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

9. Claim 18 recites the following limitations:

"the imaging system" at line 5;

"the eye tracker unit" at line 5;

"the positioning device" at line 10 and 11;

"the reference signal" at line 11; and

"the alignment " at line 12.

There is insufficient antecedent basis for these limitations in the claim.

10. Re claim 18, the word "itself" at line 8 renders the claims indefinite because one cannot be certain what "itself" intended to refer to.

With respect to claim 18, at line 10, the word "amount" renders the claim indefinite because one cannot be certain what "amount" is intended to refer to.

11. Claim 19 recites the following limitations:

"the stereo microscope" at line 5;

"the imaging recording unit" at line 5-6;

"the positioning device" at line 11 and 12;

"the reference signal" at line 12; and

"the alignment " at line 14.

There is insufficient antecedent basis for these limitations in the claim.

12. Re claim 19, the pronoun "itself" at line 9 renders the claims indefinite because one cannot be certain what "itself" intended to refer to.

With respect to claim 19, at line 11 the word "amount" renders the claim indefinite because one cannot be certain what "amount" is intended to refer to.

13. Claim 20 recite the limitation "the aperture angle" at line 3.

There is insufficient antecedent basis for this limitation in the claim.

14. Claim 21 recite the limitations "the detection of the eye by the eye tracker unit" at line 3 and "the tracking of the light marks" at line 4.

There is insufficient antecedent basis for this limitation in the claim.

15. Re claim 22, it is unclear how the claim limitations are related to the method steps recited in the method of claim 18.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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17. Claims 11, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kasahara et al (Patent 5548354)** in view of **Nishio et al (Patent 5430507)**.

18. Re claim 11,13, 15 and 17, **Kasahara et al** disclose an eye examination device comprising a controllable illumination unit (**See Col. 8, line 10-11**), an observation system (**See Col. 8, line 16-22 and Col. 3, line 3-5**), an image recording unit (**See Col. 4, line 11-12**), a central control unit (**See Fig.2, 31**); an output unit (**See Col. 11, line 20, monitor and See Col. 11, line 24, printer**), an eye tracker unit (**same as the imaging system See Col. 8, line 9 and Col. 3, line 10-13**) and means (**See fig 2, x-y and z direction position detectors**) for relative positioning of the ophthalmologic device with respect to the eye to be examined, and wherein the eye tracker unit device includes an imaging system (**imaging system, 3 also a tracker unit, See Col. 2 Line 50-53**) but does not expressly disclose the imaging system having at least two different adjustable magnifications.

Nishio et al disclose an ophthalmologic device where the imaging system has at least two different adjustable magnifications (**See Col. 2 Line 6-8 and Abstract, line 7-9**).

19. It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the eye examination device similar to that of **Kasahara et al** to include an imaging system having at least two different adjustable magnifications similar to that of **Nishio et al** in order to examine the eye at different magnifications to get expected images (**See Col. 1, line 60-64**) as taught by **Nishio et al**.

20. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kasahara et al** in view of **Sander et al (Patent 5530587)**.

Re claim 12: **Kasahara et al** disclose an eye examination device comprising a controllable illumination unit, an observation system, an image recording unit, a central control unit, an output unit, an eye tracker unit, and means for relative positioning of the ophthalmologic device with respect to the eye to be examined but does not expressly disclose that the observation system is a stereo microscope with changeable magnification.

Sander et al disclose an eye examination device where an observation system is a stereomicroscope with a changeable magnification device (**See Col. 2, line 18-21**).

21. It would have been obvious to one having ordinary skill in the art at the time invention was made to modify an eye examination device similar to that of **Kasahara et al** such that the observation system is a stereomicroscope with a changeable magnification similar to that of **Sander et al** in order to ensure that a constant stereo angle is always provided for the viewer even when there is a variation of focal intercept as taught by **Sander et al**.

22. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kasahara et al** in view of **Koest et al (6286958)**.

23. **Kasahara et al** disclose an image recording unit for recording the eye but does not expressly disclose that the image recording unit can be tilted relative to optical axis for Scheimpflug correction.

Koest et al disclose an image recording (**Scheimpflug camera**) unit that can be rotated relative to optical axis (**See Col. 2, line 11-12**) for Scheimpflug correction (**See Col. 1, line 40-51**).

24. It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the image recording unit of **Kasahara et al** so that the image recording unit can be tilted relative to optical axis in view of **Koest et al** to allow for Scheimpflug corrections and also for quick sequence photographing (**See Col. 2, line 16-21**) of eye as taught by **Koest et al**.

25. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kasahara et al** in view of **Sjoholm (6157855)**.

Kasahara et al disclose a central control unit that controls different movements of the eye device but does not expressly disclose that the central control unit has an input device such as keyboard or mouse.

Sjoholm discloses a medical device where in the central control unit has an input device such as keyboard or mouse. (**See Col. 5, line 1-7**).

26. It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the central control unit of **Kasahara et al** so that the central control unit has an input device such as keyboard or mouse as taught by **Sjoholm** in order to perform different assignments or controls during examination.

27. Claims 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fujieda (5889576)** in view of **Nishio et al** and further in view of **Zeimer (5943116)**.

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28. **Fujieda** discloses a method for positioning an eye device where in the patient's eye is brought to a fixed location by a chin and a forehead rest support (**See Fig.1**). Then the imaging system (**See Col. 4, line 29-30, also an imaging recording device**) generates signals (**See Col. 4, line 29-37 and Col. 5, line 62-65, coordinates**) from the pupil position detecting means (**See Col. 9, line 28-30**), a controller detects the eye position movements (**See Col. 4, line 41-43**) and an automatic alignment (**See Col. 3, line 23-25**), condition is performed in x-y-z directions (**See Col. 4, line 61-67 and See Col.5, line 12-17**). **Fujieda** fails to disclose changing the magnification of the imaging system and selecting a wide-angle of the imaging system (**stereomicroscope**).

Nishio et al disclose an eye examination device where the imaging system has at least two different adjustable magnifications which are changeable (**from high or low magnifications**). (**Abstract, line 7-9 and See Col. 2, line 18-21**).

Zeimer discloses an eye examination device comprising an imaging system (also a tracking system) that selects a wide-angle setting (**Col, 4 line 1-2 and Col. 3, line 41-43, where an aperture angle ranging up to 50 degrees**) to cover a desired area.

29. It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the method of **Fujieda** to have selectable wide-angle settings similar to that of **Zeimer** in order to provide a relatively large field view of the eye so that the pupil center can be exactly be detected as taught by **Zeimer**.

Furthermore, It would have been obvious to one having ordinary skill in the art at the time invention was made to provide selectable wide-angle settings to **Fujieda**, as modified by **Zeimer** with changeable magnifications as taught by **Nishio et al** in order to

examine the eye at different magnifications to get expected images (**See Col. 1, line 60-64, Col. 2, line 56-63 and Col. 2, line 10-13 of Nishio et al**).

30. Re claim 21, **Fujieda** discloses a method wherein the detection of the eye by the imaging system (tracker unit) is carried out in such a way that in evaluating the image of the eye generated by illumination the pupil center (**See Fig. 5 and 7 and See Col.6, line 25-33 and Fig.3**) is exactly determined and the tracking of the light marks (**102a, 102b, 102c, and 102d, See Col. 4, line 65-67 and Fig.4 and 5**) is carried out by continuous detection of the pupil by the eye tracker unit (**See Col. 8, line 46-51**).

31. Re claim 22, **Fujieda** discloses a method wherein a judging means determines whether or not an area necessary for measurement or examination is within the range of the pupil in accordance with illumination patterns (**See Figures 4-7, 102a, 102b, 102c, and 102d, See Col. 4, line 65-67**) in digital images by differential image recordings in images (**See Figures 4-7 for different examining images**) where each image can be easily distinguished from others for evaluation purposes. (**See Col. 4, line 65-67, to Col. 5, line 1-2, Col. 5, line 65-67 and Col. 6, line 1-4**).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

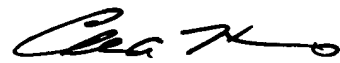
Isogai et al (5909269) teach an eye device for measuring, aligning, tracking and photographing the eye.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence N. Laryea whose telephone number is 571-272-9060. The examiner can normally be reached on 8:30 a.m.-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LNL


Charles A. Marmor, II
SPE, Art Unit 3735